

**To:** Ostrander, David[Ostrander.David@epa.gov]; Cheatham, Reggie[cheatham.reggie@epa.gov]; Woolford, James[Woolford.James@epa.gov]  
**Cc:** Stalcup, Dana[Stalcup.Dana@epa.gov]; Ruhl, Christopher[Ruhl.Christopher@epa.gov]; Calanog, Steve[Calanog.Steve@epa.gov]; Williams, Laura[williams.laura@epa.gov]; Way, Steven[way.steven@epa.gov]; Brobst, Bob[Brobst.Bob@epa.gov]; Wharton, Steve[Wharton.Steve@epa.gov]  
**From:** Hestmark, Martin  
**Sent:** Thur 8/20/2015 2:37:15 PM  
**Subject:** RE: Call on water treatment for Gold King mine

AS part of this, we are still on schedule to bulkhead the Red and Bonita. David do you know what flow will not be coming out of that portal? Will we be replacing one flow for another?

**From:** Ostrander, David  
**Sent:** Thursday, August 20, 2015 8:24 AM  
**To:** Cheatham, Reggie; Woolford, James  
**Cc:** Hestmark, Martin; Stalcup, Dana; Ruhl, Christopher; Calanog, Steve; Williams, Laura; Way, Steven; Brobst, Bob; Wharton, Steve  
**Subject:** Call on water treatment for Gold King mine

As we discussed with Reggie last night, can we schedule a call today to further discuss the issue of water treatment over the winter. Please let me know your availability. We have availability after 11:30 MDT.

Summary:

After blowout, EPA set up temporary treatment ponds to treat the 500+- gpm of discharge from the mine. This system will not be suitable for treatment over the winter and IF we need to treat continuously, a new treatment system or packaged treatment plant will need to be purchased and installed before winter. We have maybe 2 months of work time left at the mine site before winter sets in and we will not be able to access the mine.

Issue:

Before blowout, the mine was discharging around 75-100 gpm. Post blowout 500-600 gpm. We are requesting policy input on the decision to treat over the winter (and longer or continuously until a more permanent remedy is implemented).

There are 2 perspectives to consider:

1. We have “created” a new discharge point under the CWA and are responsible for this new discharge. If we continue treatment, the question would be when would we stop treating.
2. We have not created any new mine discharge, but have diverted water from a different discharge point. The total discharge to Cement Creek/Animas has not changed and we are returning to conditions before the blowout. We are going to conduct loading measurements into Cement Creek and compare to previous load analysis. Measure flows, sampling metals, getting analytical results and calculating loads may take up to a week.

To move forward we a treatment plant, we need to scope out the requirements, put out a solicitation proposal, evaluate submittals, enter a contract and purchase and deliver a treatment package to the site. The discharge will need to be piped several thousand feet down the drainage and over to Gladstone where we could access the plant in the winter. There will be no access up Cement Creek or to the mine site for the winter. If there are any failures of the piping system we will not be able to fix it over the winter. Rough, rough costs for operating this plant to treat 500 GPM run around \$200,000 a month, plus or minus 100%. Once we get more details on the specifications and discuss with vendors our requirements, we can get a closer estimate of costs, but these are a good range to start with.

We need a decision by Sunday, so we can proceed on Monday if we need .